

**Region 2 Factsheet: Lead in Newark Drinking Water****ROLES**

- New Jersey has primacy of the Safe Drinking Water Act (SDWA) Lead and Copper Rule (LCR).
- New Jersey Department of Environmental Protection (NJDEP) implements the State's drinking water program, including the LCR.
- EPA Region 2 (R2) oversees NJDEP's drinking water program.
- City of Newark owns the Newark Water Department (NWD), which is subject to SDWA regulations, such as the LCR.

**NEWARK WATER DEPARTMENT**

- NWD is a large drinking water system serving a population of over 270,000 people – water is sourced from the Pequannock River, as well as purchased from the New Jersey Drinking Water Service District (NJDWSD) Wanaque North.
  - Most of the population served have environmental justice concerns.
- NWD has verified to NJDEP that the system has nearly 18,000 known lead service lines (LSLs); there are approximately 5,600 lines whose status (LSL or not) is unknown.
  - No LSLs serve Newark public schools, but NJDEP is double-checking this data.
- In Newark, LSLs are owned by the homeowner, not NWD.
- NWD is currently in compliance with LCR requirements.

**BACKGROUND: HOW LEAD IN NEWARK DRINKING WATER WAS IDENTIFIED**

- In April 2016, R2 audited NJDEP's implementation of the LCR and identified deficiencies (e.g. Tier 1<sup>1</sup> sampling sites were not used) after finding LCR issues at Trenton's drinking water system in 2015.
- As a result, in November 2016 NJDEP began implementing an action plan to correct the identified LCR deficiencies, which included a complete evaluation of large drinking water systems, such as NWD.
- In 2017, NWD collected samples at new, Tier 1 locations, resulting in a lead action level exceedance (ALE; i.e. a lead level greater than 15 ppb). The system has since been on six-month monitoring. Lead ALEs are still occurring – the data below is from NJDEP's Drinking Water Watch.

Monitoring Period	Lead 90 <sup>th</sup> Percentile (ppb)
2018 (July – Dec)	<b>42.9</b>
2018 (Jan – June)	<b>17.8</b>
2017 (July – Dec)	<b>26.7</b>
2017 (Jan – June)	<b>27</b>
2013-2015	10
2010-2012	9

- As required by the LCR after an ALE, NWD had to develop a Corrosion Control Treatment (CCT) Plan, and hired a consultant, CDM Smith, to help. CDM Smith asked EPA's Office of Research and Development (ORD) for technical assistance.
- ORD conducted sequential samples for two homes and found lead levels as high as 148 and 399 ppb.
  - Both homes are in the western side of the City of Newark, which receives water from Pequannock River, where a silicate-based inhibitor is used for corrosion control.
  - ORD has samples of LSLs from three other homes in Newark (R2 has asked ORD to prioritize the analysis of these samples).

- On October 1<sup>st</sup>, ORD shared the sequential sample results with R2 under the Water Infrastructure Improvements for the Nation (WIIN) Act Strategic Plan, and R2 immediately shared the results with NJDEP. It was the first time that NJDEP had heard of the samples.
- NJDEP verified that the two homeowners had been notified.

## RESPONSE TO LEAD IN NEWARK DRINKING WATER

### New Jersey

- New Jersey's response to lead in Newark drinking water is being handled out of the Governor's office, which is coordinating among various agencies, including the New Jersey Department of Health (NJDOH).

### NJDEP

- NJDEP is being proactive in their response and pushing NWD to do the same (e.g. asking NWD to treat the 5,600 unknown lines as LSLs).
  - NJDEP is currently developing FAQs and exploring actions to address and respond to the high lead levels that could be impacting Newark residents, including distributing bottled water and conducting sampling at homes.
  - NJDEP is trying to determine when and how Newark lead levels may have become elevated –
    - A pH adjustment from 8 to 7 in 2014/2015, to bring the NWD system into compliance with the Stage 2 Disinfection Byproducts Rule, may have altered the system's water chemistry.
    - Elevated lead levels were detected because NWD began sampling at Tier 1 sites
    - The pH adjustment and new Tier 1 sampling sites may have been confounding factors
  - NJDEP is mapping the location of LSLs in the City of Newark and overlaying blood-lead level data to try to identify where residents may be exposed to lead.
  - NJDEP is looking at other public water systems with ALEs to determine if there are other high-risk systems like NWD in New Jersey.

### City of Newark and NWD

- The City of Newark will begin distributing free filters (~40,000 filters and ~60,000 cartridges are being delivered by PUR this week) on October 12<sup>th</sup>, and will recommend bottled water for children under 6 and infants on formula until filters are distributed.
  - Newark is developing a detailed distribution plan, including door-to-door and satellite site distribution.
- Newark is also planning to conduct sequential sampling of LSLs in the east, west and central wards.
- Newark is also establishing a comprehensive communications plan that includes social media outreach, public meetings, press releases, and flyers.
- NWD, along with NJDEP and EPA, are currently reviewing the draft CCT plan given to NWD by CDM Smith; Newark will defer to NJDEP for implementation requirements.
- NWD is not required to do the 7% LSL replacement required under the LCR because homeowners, not NWD, own the LSLs in Newark. NWD has however initiated a 10-year LSL replacement program, which plans to replace 1,600 lines per year using Drinking Water State Revolving Fund (DW-SRF) monies.

# Deliberative Process / Ex. 5

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